(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



A DORA BUNDON NEDANG KAN BONY BAWA DIGI AN KAN BUNCAN KAN BUNCAN KAN BUNCAN KAN BUNCAN KAN BUNCAN KAN KAN KAN

(43) International Publication Date 29 July 2004 (29.07.2004)

PCT

(10) International Publication Number WO 2004/064248 A1

(51) International Patent Classification7: H04L 27/36, H04B 1/04

H03F 1/32,

(21) International Application Number:

PCT/EP2003/011938

(22) International Filing Date:

3 November 2003 (03.11.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 03000495.6 13 January 2003 (13.01.2003) 60/441,459 21 January 2003 (21.01.2003) US

- (71) Applicant (for all designated States except US): TELE-FONAKTIEBOLAGET L M ERICSSON (publ) [SE/SE]; S-164 83 Stockholm (SE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): JACOBSSON, Peter [SE/SE]; Uardav. 6D, S-224 71 Lund (SE). NORDQVIST, Per [SE/SE]; Flormansgatan 4 B, S-223

54 Lund (SE). GUSTAVSSON, Björn [SE/SE]; Bankgatan 14 C, S-223 52 Lund (SE).

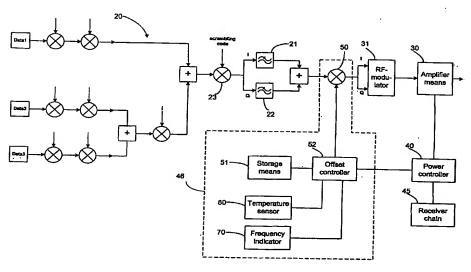
- (74) Agent: BYSTROM, Linus; Ström & Gulliksson IPC AB, P.O. Box 793, SE-220 07 Lund (SE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

[Continued on next page]

(54) Title: DEVICE AND METHOD FOR PREDISTORTING AN INPUT SIGNAL



(57) Abstract: A device, comprising a storage means (51) for storing phase change values, and a phase offset adding means (50) for predistorting an input signal at an amplifier means is disclosed. A controller means (52) is connected to the storage means (52) and the phase offset adding means (50). Said controller means (52) is adapted to retrieve phase change values from the storage means (51), and output an offset signal to the phase offset adding means (50), which is adapted to add said offset signal to the input signal. The invention also discloses a method for predistorting an input signal at an amplifier means (30) by retrieving phase change values from a look-up table stored in the storage means (30) in response to an indication to change the gain level of the amplifier means (30).



WO 2004/064248 A1



 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.